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10/790,368	03/01/2004	Lavanya Srinivasan	IDF 2655 (4000-17600)	9373

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STEELMAN, MARY J	
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2191	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/790,368	SRINIVASAN ET AL.	
	Examiner	Art Unit	
	MARY STEELMAN	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 5-10, 12, 13-15, 19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

See MPEP 7.35.01 Trademark or Trade Name as a Limitation in the Claim

4. Claim 3 contains the trademark/ trade name Rational Rose.

5. Claims 5, 7, 8, 12, 13, 19, and 20 contain the trademark/trade name eTOM.

Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

The trademark Rational Rose is improperly relied upon in the claims to incorporate the technical features of a particular programming language environment. However, the trademark

Rational Rose can only properly define the source of the business process standard, namely IBM Corporation. Accordingly, the identification/description is indefinite.

The term eTOM is a registered trademark or TeleManagement Forum. The article by Michael Kelly (The TeleManagement Forum's Enhanced Telecom Operations Map (eTOM), 2003) recites (page 109, 3rd paragraph) "The enhanced Telecom Operations Map™ (eTOM) initiative is an ongoing TeleManagement Forum (TM Forum) project...", thus the specification is not a set definition, but rather still evolving.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 1 recites a 'system' but fails to include any hardware to enable the functionality. Claims recite "software pre se", which is non-statutory. Claim 1 may be amended to include a processor, memory devices, input/output devices, network connectivity devices, as disclosed in the Specification at [0055].

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 4, 11, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,950,802 B1 to Barnes et al.

Per claim 1:

A system for building software use cases and related state diagrams for business requirements, the system comprising:

Barnes: Col. 2: 17-37, model definition, requirements Col. 8: 62-67, use case model work, dependency diagram, relationships,

-a business activity model identifying a plurality of business activities, the business activity model operable to maintain a hierarchical relationship between at least some of the plurality of business activities;

Barnes: Col. 3: 51-67, Engagement template 108 describes the system and method for an actual project. Domain 104 and work product descriptions 112 describe what to develop for a project. Process description 114 , including phase 116, activity 118, and task 120 describe how to develop a project. Col. 8: 62-67, use cases, dependency diagram (hierarchical relationship)

-a modeling tool operable to build software uses case based on a business requirement, the modeling tool further operable to maintain relationships between at least some of the plurality of software use cases, at least some of the plurality of business activities, and a business requirement;

Barnes: See FIG. 1 Col. 4: 32, Business domain 109 organizes work product descriptions 112 concerned with the structured investigation of current and desired situations within the client's business. It contains work product descriptions 112 needed to identify, assess and design

business processes; define the business environment and formulate strategy for the current and future aspects of a client's business; identify, evaluate and select a capability or solution based on a set of business requirements; analyze requirements and create information models that meet business objectives...(modeling tool to build software use cases based on a business requirement)

-an integration component in communication with the business activity model and the modeling tool, the integration component operable to map at least some of the plurality of use cases in the modeling tool according to the hierarchical relationship of the business activities maintained by the business activity model;

Barnes: Col. 4: 54-67, Organization domain 113 organizes work product descriptions 112...integrate process, organization and technology plans...

-a graphical user interface operable to illustrate the relationship of at least some of the software uses cases with the business requirement; and

Barnes: Col. 8: 62-col. 9: 2, Use case model work product 148...is included in the architecture domain 107 dependency diagram of FIG. 6 to visually communicate the relationship amongst the domains 104. Use case model work product 148 describes the functional requirements of the system under development. The model uses graphical symbols and text to specify (graphical user interface, illustrates relationships & requirement) how users in specific roles will use the system(i.e., use cases). Col. 12: 23-40, user interface conceptual model work product 159

-a state diagram component operable using the modeling tool with the mapped use cases to prepare state activity diagrams for at least a portion of the business requirement.

Barnes: Col. 10: 31-38, An architectural template 154 includes abstract use cases, interaction diagrams, and class diagrams and may represent collaborations between components or collaborations between object. Often an overview of the system (state diagram), in the form of a layered representation, can be derived from the classes that participate in these typical collaborations. Such layered representations take the structure of an informal picture accompanied by free format text. Col. 10: 40-57, Transaction strategy 218 is a description of how a project intends to ensure that the system will maintain a consistent state...

Per claims 2 and 17:

-the business activity model aligns the plurality of business activities to a plurality of business domains and identifies each of the plurality of business activities to be a high level, a middle level, or a low level business activity.

Barnes: Col. 6: 13-48, process description 113 used to decompose the development...This hierarchy is known as a work breakdown structure...highest level, phase 116, intermediate level, activity 118, lowest level, task 120.

Per claim 4:

-the integration component is further operable to provide a list of the plurality of business activities selectable for building a state activity diagram.

Barnes: Col. 10: 31-38, architectural template 154 includes ...Often an overview of the system (state activity), in the form of a layered representation, can be derived...two important types of architectural template 154 are transaction strategies 218 (used for state transition) and persistence strategies.

Per claim 11:

A method for building a state activity diagram, comprising:

-providing a business activity model enumerating domains of a business and a plurality of business activities, the business activity model maintaining a hierarchical association of the plurality of business activities;

-segmenting a plurality of use cases according to the hierarchical relation of the plurality of use cases with the plurality of business activities, the plurality of use cases based on a business requirement; selecting one of the plurality of use cases;

-and displaying the use case in a state activity diagram, the state activity diagram providing a first portion of the use case associated with a first domain of the business and a second portion of the use case associated with a second domain of the business.

See rejection of limitations as addressed in claim 1 above. Barnes disclosed a system and method for implementing a project. Col. 3: 53, Domain 104 and work product descriptions 112 describe what to develop for a project. Process description 114 including phase 116, activity 118, and task 120 describe how to develop a project. Col. 6: 15, The process description 114 is

used to decompose the development and delivery process into a hierarchy of steps, known as a work breakdown structure. Col. 8: 63, Use case model work product 148 describes the functional requirements, specifies how users in specific roles will use the system.

Per claim 16:

A method for building a software use case, comprising: providing a business activity model enumerating a plurality of business activities; selecting a first business activity from the plurality of business activities; defining a plurality of software use cases based on a business requirement; providing an integration component operable to selectively organize, in a modeling tool, the plurality of software use cases according to the relationship of each of the plurality of software use cases with the plurality of business activities; and using the modeling tool to build software uses cases according to the business activity model.

See rejection of claim 1 and 11 above.

Per claim 17:

-the business activity model aligns the plurality of business activities according to domains of a business, and wherein the plurality of business activities are selected from the group consisting of high level business activities, middle level business activities, and low level business activities.

Barnes: Col. 4: 32-46, Business domain 109 organizes work product descriptions 112...solution based on a set of business requirements; analyze requirements... Col. 6: 13-53, decompose the development and delivery process into a hierarchy of steps...highest...intermediate...lowest

level in the work breakdown structure...

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 5-10, 12-15, and 18- 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,950,802 B1 to Barnes et al., in view of "The TeleManagement Forum's Enhanced Telecom Operations Map (eTOM), by Michael B. Kelly (March 2003) (hereinafter Kelly).

Per claims 5, 12, and 19:

Barnes failed to disclose:

-the business activity model is based on the Tele-Management Forum enhanced Telecom Operations Map (eTOM).

However, Kelly disclosed eTOM as a business activity model (page 109, 3rd paragraph).

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Barnes, using the teachings of Kelly, because Barnes disclosed the need (col. 1: 25) for a system development process that enables consistency of solution design and delivery. OSS/BSS (Kelly, page 109, last paragraph), Operations Support System / Business

Support System, addresses a business development cycle, including requirements used in business process modeling.

Per claim 6:

-the business activity model is stored in a spreadsheet file.

Barnes: Col. 3: 25-47, Each element of FIG. 1 and FIG. 6 may be implemented as a database (spreadsheet file), such as a relational or hierarchical database, or as a knowledge based system or the like, which may be accessed and manipulated by way of browser or some other terminal application...

Per claims 7 and 13:

Barnes failed to disclose:

-the hierarchical relationship of the plurality of business activities is further defined as an eTOM level O, an eTOM level 1, an eTOM level 2, and an eTOM level 3.

However, Kelly disclosed eTOM levels at page 111, 4th paragraph, and page 118, 3rd paragraph. Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Barnes, using the teachings of Kelly, because Barnes disclosed the need (col. 1: 25) for a system development process that enables consistency of solution design and delivery. OSS/BSS (Kelly, page 109, last paragraph), Operations Support System / Business Support System, addresses a business development cycle, including requirements used in business process modeling.

Per claims 8, 13, 14, 18 and 20:

-the software use cases are further defined as one of a scope use case, a process use case, and a system integration use case,

Barnes: Col. 8: 57-col. 9: 28, Use case model work product 148, describes the functional requirements, specifies how users in specific roles will use the system Col. 9: 9, use cases 202 including number, subject area, business event, name overview, preconditions, description, associations, inputs, outputs, traceable to, usability index Col. 9: 23, use case 202 overviews as well as communication associations 203 between the actors and the use cases provide an overview of the functional requirements See FIG. 6, #148, FIG. 7, #202 & #208

Barnes failed to disclose:

-and wherein the integration component aligns the scope use cases to the eTOM level 0, the process use cases to the eTOM level 1 and eTOM level 2, and the system integration use cases to the eTOM level 2 and eTOM level 3 in the modeling tool.

However, Kelly disclosed eTOM levels for increasing levels of decomposition, at page 109, 3rd paragraph, "The eTOM initiative is an ongoing project to deliver a business process model or framework...describes all the enterprise processes required...with hierarchy, relationships, and individual process decompositions...to ensure that activities dovetail effectively and support products that mesh with enterprise needs. Page 111, paragraph 4, The initial 'conceptual Level' view of the framework shows a structuring of the overall enterprise...known as Level 0 process groupings. Page 112, 2nd paragraph, the structure shown here defines 'Level 1' processes within each of the three 'Level 0' processes... Page 112, last paragraph, As the process decomposition

proceeds, processes at the next level-Level2- are defined... Page 118, last paragraph, more detailed process decompositions (at Level 3, and then Level 4...to show their linkage and the process flows interconnecting these.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Barnes, using the teachings of Kelly, because Barnes disclosed the need (col. 1: 25) for a system development process that enables consistency of solution design and delivery. OSS/BSS (Kelly, page 109, last paragraph), Operations Support System / Business Support System, addresses a business development cycle, including requirements used in business process modeling.

Per claim 9:

-the process use cases represent functionality of a business process based on a functional requirement of the business requirement.

Barnes: Col. 8: 57-col. 9: 28, Use case model work product 148, describes the functional requirements, specifies how users in specific roles will use the system Col. 9: 23, use case 202 overviews as well as communication associations 203 between the actors and the use cases provide an overview of the functional requirements See FIG. 6, #148, FIG. 7, #202 & #208

Per claim 10:

-the scope use cases represent a project scope based on the business requirement.

Barnes: Col. 4: 32, Business domain 109 organizes work product descriptions 112...identify, evaluate and select a capability or solution based on a set of business requirements; analyze requirements and create information models that meet business objectives

Per claim 15:

-providing a system diagram model related to the system integration use case;

-providing a functional diagram model related to the business process use case;

-using at least a portion of the system diagram model to model state activity diagrams for the system integration use cases;

-and using at least a portion of the functional diagram model to model the state activity diagrams for the business process use cases.

Barnes: FIG. 6, Interrelationships of work product descriptions for an architecture domain: Use Case Model, 148, Class diagram, 158, architecture overview diagram, 156, component model, 160, UI Conceptual Model, 159, Operational Model, 178 FIG. 11, Conceptual view, Specification view, Implementation view FIG. 13, Operational Model Abstract: a set of process descriptions; a set of work product descriptions; and engagement models collecting the process descriptions and work product descriptions into models for implementing typical projects addressing marketplace requirements...defining an engagement model...

See rejections above as related to state activity and use cases.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,950,802 B1 to Barnes et al., in view of US Patent Application Publication 2005 / 0154695 A1 to Gonzalez et al.

Per claim 3:

Barnes failed to explicitly disclose:

-the modeling tool is defined to be the IBM Rational Rose tool.

However, Gonzalez disclosed:

[0033] Note that meta-metadata 153 may identify other relationships...Meta-metadata 153 also identifies one or more attributes of one or more nodes...In some embodiments, meta-metadata 153 is generated by use of a tool that provides API access to the metadata 152 (such as Rational Rose available from IBM)...which is prepared from UML instructions. Note that in some embodiments a UML model of a user's application is prepared during the design of database 151 (FIG. 1A). UML stands for uniform modeling language that is commonly used in the industry for object oriented designs.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify Barnes, using the teachings of Gonzalez, because one would be motivated to use Rational Rose tool, as it is well known for use in modeling UML in a software development environment. Barnes disclosed a software development environment and modeling.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached at (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned: 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman
05/24/2007

/Mary Steelman/
Primary Examiner